

## **Nathanael Greene's Blog**

## West Virginia: An Unexpected Example Of Why Extending The Solar Investment Tax Credit Is So Important



West Virginia isn't usually the first place you think of when you think about solar power. It doesn't have the bright sun of the Southwest, or the solar pride of place found in states like Massachusetts, which is equally bright but has a huge amount of solar installed. Add to that impression the one given by mouthy politicians in the state, who regularly inveigh against clean energy and, this February, overturned the state's renewable energy standard. West Virginia doesn't allow third-party ownership of solar arrays, a practice that allows homeowners and businesses to go solar with no upfront costs and is spurring solar growth across the country. You can see why things don't always seem so promising for solar in the Mountain State.



Using an innovative financing model, West Virginia's Solar Holler brings solar to houses of worship (like the Shepherdstown Presbyterian Church, pictured here) and nonprofits, and offers job training, too. "What's critically important for the state and the country," says founder Dan Conant, is that we "make sure we're not leaving West Virginia behind."

Nevertheless, solar is a growing industry in West Virginia, supplying new jobs and clean power in a state that needs both. To keep solar growing there, advocates are coming up with impressive models of solar finance, job training, and community organizing. What they need most of all, though, is an extension of the federal solar investment tax credit (ITC), most of which is set to expire at the end of next year. That tax credit helps level the playing field for clean energy--fossil fuels have received government subsidies for more than 100 years--and also drives down the cost of solar and other renewable energy technologies. "When something's going well, you want to support it," says John Christensen, of the solar ITC. Christensen is the government relations and advocacy director at Mountain View Solar, the state's largest installer. The company has grown from just a couple of employees in 2009 to 20 full-time staff this year. "We're growing exponentially right now," he says. "If they take away the ITC, it's going to hurt."

Despite what you hear from politicians, there's genuine excitement about solar power in West Virginia. After an article about WV Solar United Citizens appeared recently in the capital city's *Charleston Gazette-Mail*, Karan Ireland, the state program director there, "got a ton of

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calls from people across the state." (WV Solar United Citizens organizes solar collective purchasing groups that bring people together to build community support for installing solar, to provide technical expertise, cut costs and ensure quality.) West Virginia University is one of a select group of universities that has participated in the last two US Department of Energy Solar Decathlons. (The Decathlon is a great intercollegiate competition that pit teams from across the country and around the world against each other as they design advanced, totally solar-powered homes.) The WVU group presents at schools and community groups. "Wherever we go," says Professor Dimitris Korakakis, the group's adviser, "people are interested and excited."

The state's policy environment hasn't stopped the power of solar visionaries there, either. West Virginia native Dan Conant wanted to bring the clean energy technology to houses of worship and non-profit groups in his home state. But because third-party power purchase agreements aren't allowed, he dreamed up a brilliant financing idea--a donation model that requires no cash donations--to make solar happen. The model his group, Solar Holler, uses is a bit complicated but pretty inspiring, too. First, Solar Holler identifies a project it wants to pursue. Its first one was an array at the Shepherdstown Presbyterian Church, the second an array on the Bolivar-Harpers Ferry Library. Then, it signs up homeowners/donors who, in turn, sign up with a company called Mosaic Power. Mosaic Power works in an arcane part of the electric system called the frequency regulation market. In response to signals from grid operators, Mosaic remotely turns electric hot water heaters on to soak up excess electric power when there's too much on the grid, and turns them off when there's not enough. Normally, Mosaic pays homeowners in the areas it serves \$100 for signing up and then additional money for participating in frequency regulation, for turning their water heaters on and off. In Solar Holler's model, those C-note sign-up fees go to Solar Holler to help pay for the solar arrays installed and the additional payments help with the remaining financing. Like I said, pretty innovative and exciting.

Solar Holler is now working on a third project at a West Virginia affordable housing and job-training provider called Coalfield Development Corporation. Its job-training programs help young people, ages 18-25, from coalfield families. Most of the training is in construction. But, with Solar Holler's help, the trainees are learning to become solar installers, too. "If we're going to scale up solar in this state," Conant says, "we have to be creating jobs and training at the same time."

That scaling up is the goal of an increasing number of solar advocates across the state, who understand how vital solar can be to a state whose signature industry--coal--is now in decline. (That's due, in very large part, not to renewable energy but to the current low cost of natural gas and of coal mined in other parts of the United States.) Conant and Christensen both believe the state's considerable manufacturing capacity could bring solar manufacturers to West Virginia. They know the solar industry can provide the kind of good-paying jobs to high school grads that coal used to supply, just as it has for tens of thousands of Americans across the country. But that will be the case only if we continue to support solar, just as the nation's taxpayers have supported fossil fuels for more than a century.

In West Virginia, the solar ITC is "a huge incentive" to potential homeowners who, right now, make up most of the state's solar market, says Ireland. "If the ITC sunsets, it will be a definite impact. We hold out hope that it will be extended."



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